determining and evaluating a change of the viscosity as a function of a temperature and frictional torque of the engine.

40. (New) The method according to claim 39, wherein the internal combustion engine is a motor vehicle engine.

41. (New) The method according to claim 39, further comprising the step of determining starter torque, the viscosity change determining and evaluating step including the substep of determining the frictional torque in accordance with the starter torque.

42. (New) The method according to claim 41, wherein the starter torque is determined in the starter torque determining step in accordance with electric power consumed by the starter during start and a known starter characteristic curve.

43. (New) The method according to claim 41, wherein the viscosity change determining and evaluating step includes the substep of determining the frictional torque in accordance with the starter torque and the engine acceleration power consumed.

44. (New) The method according to claim 39, further comprising the step of determining whether the change of the viscosity is outside a range of -15% to +50% of a predefined viscosity value at a same temperature, the viscosity change determining and evaluating step being performed in accordance with the step of determining whether the change of the viscosity is outside the range of -15% to +50% of the predefined viscosity value at the same temperature.

45. (New) A method of determining viscosity of motor oil of an internal combustion engine, comprising the steps of:

determining an engine frictional torque; and determining the viscosity of the motor oil in accordance with the engine frictional torque.

- 46. (New) The method according to claim 45, wherein the engine frictional torque determining step includes the substep of estimating the engine frictional torque, the viscosity of the motor oil being determined in the motor oil viscosity determining step in accordance with the estimated engine frictional torque.
- 47. (New) The method according to claim 45, wherein the engine frictional torque is determined in the engine frictional torque determining step in accordance with engine data available in an engine controller.

7 48. (New) The method according to claim 47, wherein the engine data includes:

an engine torque generated in accordance with at least one of an injection time and a throttle valve position;

a signal that indicates whether a torque is transmitted to a drive train; and at least one signal relating to an operating condition of at least one auxiliary unit driven by the engine.

49. (New) The method according to claim 47, wherein the internal combustion engine includes a diesel engine, the engine data including:

a signal that indicates whether a torque is transmitted to a drive train;

a load signal of a generator as a measure of an electric power generated by a generator;

an engine rpm;
an injected amount of fuel;
an engine temperature; and
an ambient temperature.

60. (New) The method according to claim 45, further comprising the step of determining a start torque and an engine acceleration power consumed, the engine frictional torque being determined in the engine frictional torque determining step in accordance with the start torque and the engine acceleration power consumed.

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